

Washington Mill Surveys 2002

Series Report #16

.....

May 2005



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Doug Sutherland - Commissioner of Public Lands

Acknowledgements

DNR appreciates the support of the major forest industry associations, individual mill owners, operators and exporters who provided data for this survey.

This report was prepared by the Natural Resource Economists Group of the Office of Budget and Economics of the Department of Natural Resources. Dr. Bruce Glass, Dave Larson, the Natural Resource staff helped make this report possible. Appreciation is also extended to the USDA Forest Service's Pacific Northwest Research Station for their assistance in supporting the computer program that was used to compile the data for this report.

This report was prepared by:

**DNR Office of Budget and Economics
Natural Resource Economist Group**

| | |
|-----------------|--------------------|
| Bob Van Schoorl | Budget Director |
| Phil Aust | Lead Economist |
| Dave Larsen | Economist |
| Dorian Smith | Layout and Editing |

Additional Assistance

| | |
|------------------|--------------------|
| Blanche Sobottke | DNR Communications |
|------------------|--------------------|

This report was significantly aided by the database program written by:

Bruce Hiserote
Pacific Northwest Research Station
USDA Forest Service
Portland, OR

Address requests regarding this report to:

Dorian Smith
Office of Budget and Economics
Department of Natural Resources
PO Box 47041
Olympia, WA 98504-7041

Phone: 360.902.1026 **FAX:** 360.902.1780
E-mail: dorian.smith@wadnr.gov **Web Site:**

<http://www.dnr.wa.gov.htdocs/obe/obehome4.htm>

People who need this information in an alternate format may call:
360.705.0582 or TTY 360.902.1125

Washington Mill Survey 2002 Series Report #16

.....

May 2005

Prepared by:
Dorian Smith
Public Information Officer

Bruce Hiserote
Pacific Northwest Research Station, USDA Forest Service



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Doug Sutherland - Commissioner of Public Lands

Table of Contents

| | |
|--|--------------------|
| Acknowledgements | Inside front cover |
| Introduction / Abbreviations / Conversions | iv |
| Map of Production Regions | v |
| Report Year and Table Number Cross Index | vii |

Tables:

Washington Statewide Summary

| | | |
|--------|---------|--|
| Page 2 | Table 1 | Number of Mills by Industry |
| Page 3 | Table 2 | Primary wood use and mills' location |
| Page 3 | Table 3 | Locations of mills and sources of logs |
| Page 4 | Table 4 | Location of mills using logs from national forests |
| Page 5 | Table 5 | Mills' dependency on sources for logs |
| Page 6 | Table 6 | Logs by ownership source |
| Page 7 | Table 7 | Wood species |
| Page 8 | Table 8 | Production and disposition of wood and bark residues |
| Page 8 | Table 9 | Log use by log diameter |

Sawmills

| | | |
|---------|----------|--|
| Page 10 | Table 10 | Number of sawmills by size |
| Page 10 | Table 11 | Eight-hour single shift capacity |
| Page 10 | Table 12 | Sawmills with selected equipment |
| Page 11 | Table 13 | Number of sawmills by headrig type and size |
| Page 12 | Table 14 | Wood type |
| Page 12 | Table 15 | Average number of operating days |
| Page 12 | Table 16 | Log use by diameter |
| Page 13 | Table 17 | Origin of logs |
| Page 14 | Table 18 | Sources of logs for sawmills |
| Page 15 | Table 19 | Logs by species for sawmills |
| Page 16 | Table 20 | Degree of lumber manufacture |
| Page 16 | Table 21 | Lumber production by headrig |
| Page 17 | Table 22 | Production and use of all types of wood residues |
| Page 18 | Table 23 | Production and use of bark residue |

Veneer and Plywood Mills

| | | |
|---------|----------|---|
| Page 20 | Table 24 | Number of veneer and plywood mills |
| Page 20 | Table 25 | Veneer and plywood mills 8-hour shift capacity |
| Page 20 | Table 26 | Veneer and plywood mills by lathe log diameter limit |
| Page 21 | Table 27 | Number of veneer and plywood mills by core size |
| Page 21 | Table 28 | Number of veneer and plywood mills by equipment |
| Page 21 | Table 29 | Average operating days per year by veneer mill type |
| Page 22 | Table 30 | Volume by log diameter |
| Page 22 | Table 31 | Production and use of wood residues from veneer and plywood mills |
| Page 22 | Table 32 | Veneer and plywood production |

Pulp Mills

| | | |
|---------|----------|--|
| Page 24 | Table 33 | Pulp mills by processing type |
| Page 24 | Table 34 | Pulp mill capacity |
| Page 25 | Table 35 | Pulp mills' average operating days |
| Page 25 | Table 36 | Pulp mill production by product and operation |
| Page 25 | Table 37 | Wood used by pulp mills (except roundwood) |
| Page 26 | Table 38 | Chips and residues |
| Page 27 | Table 39 | Residue and off-site chip use by state or province |

Shake and Shingle Mills

| | | |
|---------|----------|--|
| Page 29 | Table 40 | Shake and shingle mills' capacity and operating days |
| Page 29 | Table 41 | Shake and shingle mills with selected equipment |
| Page 29 | Table 42 | Wood used |
| Page 29 | Table 43 | Ownership origin of logs |
| Page 29 | Table 44 | Shake mill production |
| Page 30 | Table 45 | Shake mill wood and bark residue production and use |

Post, Pole and Piling Mills

| | | |
|---------|----------|---|
| Page 32 | Table 46 | Post, pole and piling mills operation characteristics |
| Page 32 | Table 47 | Post, pole and piling mills with selected equipment |
| Page 32 | Table 48 | Log use by diameter |
| Page 32 | Table 49 | Mill shipments |

Log Export Operations

| | | |
|---------|----------|----------------------------------|
| Page 34 | Table 50 | Log export operations and volume |
| Page 34 | Table 51 | Logs exported by diameter |
| Page 35 | Table 52 | Log exports by species |
| Page 35 | Table 53 | Origin of export logs |

Chipping Mills

| | | |
|---------|----------|---|
| Page 37 | Table 54 | Capacity and operating days of chipping mills |
| Page 37 | Table 55 | Chip logs by diameter |
| Page 38 | Table 56 | Ownership origin of logs |
| Page 38 | Table 57 | Chip logs by species and region |

Introduction

Based on questionnaires conducted by the Department of Natural Resources, this report includes statistics on wood use and the characteristics of primary wood processing mills, during the calendar year 2002. It is the 16th biennial survey that documents mill characteristics, wood volume and the input of raw materials into the state's seven primary wood-using industries:

- Sawmills
- Pulp mills
- Shake & Shingle
- Whole log chipping
- Veneer & Plywood mills
- Post, Pole & Piling operations
- Log export operations

Since this survey covers the entire industry, sampling errors are not a factor. However, when some data was not provided by mill owners or managers, estimates were calculated from data in previous years. In total, this report provides the most reliable estimates of the state's woodproducts industries in Washington.

Information about individual mills or companies has been kept confidential. In recent decades as the industry downsized in some sectors, it has been necessary to combine table data to avoid revealing mill identity or ownership. In this edition nearly all tables list data from five geographic/economic regions instead of the state's 39 counties. Though the data is less detailed, we believe it is easier to grasp.

Abbreviations and Conversions

Lumber volume

board foot: a piece of wood 12 inches x 12 inches x 1 inch

mbf: one thousand board feet (this report uses Scribner log rule method).

mmbf: one million board feet

Plywood / Veneer

msf: thousand square feet 3/8 inch basis

Pulp

ton: 2,000 pounds

bone dry tons (BDT): 1.2 tons or 2,400 pounds

air dry metric tons (ADMT): 2,200 pounds; with 10% water content

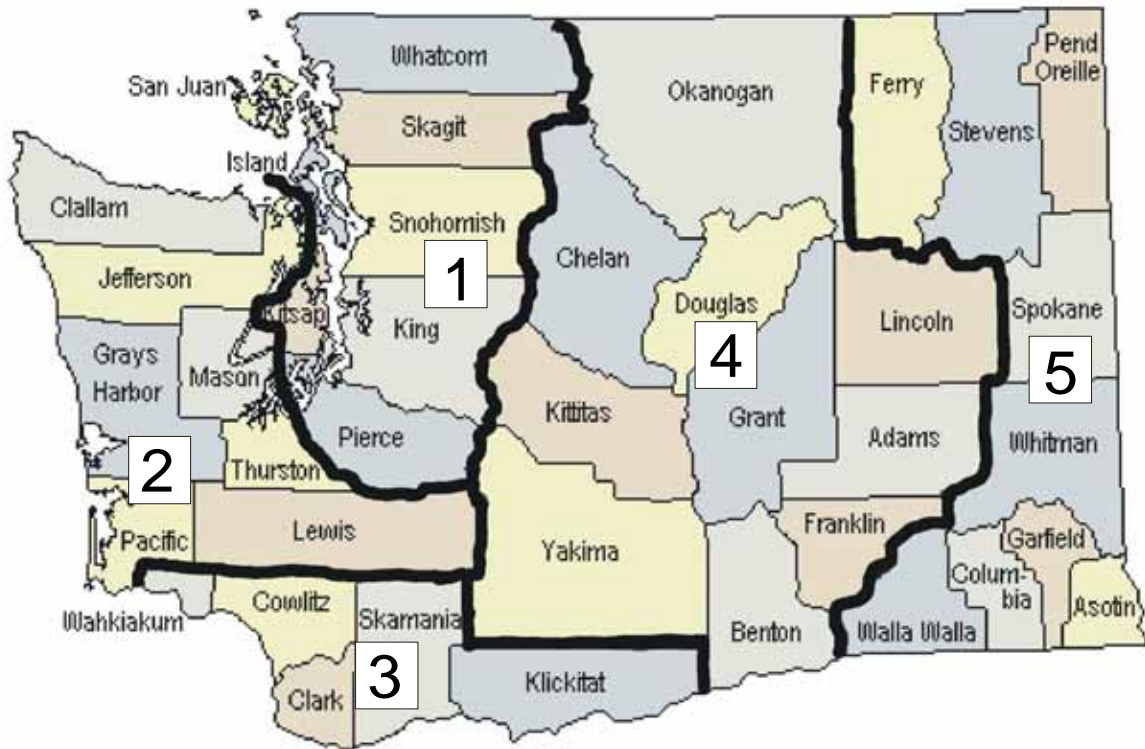
Shake and Shingle:

square: 10 square feet (5 squares makes a cord)

bundle: 5 bundles makes a square

cord: 1 mbf; 128 cubic feet (stacked); 80 cubic feet of solid wood

Figure 1: The State's Economic and Production Regions where mills are located



Throughout this report these regions are used to indicate the location of processing — not the harvesting — of wood products:

1. Puget Sound
2. Olympic Peninsula
3. Lower Columbia
4. Central Washington
5. Inland Empire

